

Human Resource Development (HRD) and Foreign Remittances

The case of South Asia

Muhammad Abdul Wahab, Vaqar Ahmed and Hamid Mahmood

Key points

- South Asian remittances have grown counter-cyclically, increasing from US\$17 billion in 2000 to US\$80 billion in 2010 helping economies augment their balance of payments.
- Three South Asian countries were among the world's top recipients of remittances in 2010 including India (US\$55 billion), Bangladesh (US\$11.1 billion) and Pakistan (US\$9.4 billion).
- An analysis suggests that an increased stock and quality of human resources raises remittance inflows implying the need for policies to improve education and training.
- South Asian labour market entrants will grow faster than the capacity of domestic economies to absorb them so workers will have to compete within the global labour force.

Introduction and background

The South Asian region has experienced substantial economic growth during the past decade. This has also been complemented by a rising middle class, which not only acts as an impetus to growth but also adds to the innovation and entrepreneurship potential available within the region. While a growing number of people in the labour force age group represent a growing potential for increased output by the private sector, there are



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also challenges associated with the provision of public goods. For example, a growing labour force will demand an improved infrastructure and social services, and this is where the governments of almost all South Asian economies feel challenged (Easterly 2001; Durr-e-Nayab 2011). The literature also tells us that, even beyond the economic importance of the youth bulge and growing labour force numbers, one should also appreciate the impact on social, political and cultural change (Collier 1999; Acemoğlu & Robinson 2003; Basu 2003; Bannerjee & Duflo 2007).

As observed post-2007, South Asian countries have not been able to fully absorb those coming into the labour market (GoP 2011). This implies that many unemployed or underemployed end up looking abroad for post-education opportunities. However, those penetrating foreign labour markets are only the ones who have relevant training and skills, which implies that human resource development (HRD) policies not only need to address the needs of local economies, but also require a congruence with external labour demand patterns outside the country. Most skilled migrants in the South Asian Diaspora carry out jobs in foreign countries having received training in their home countries.

This study focuses on the link between HRD, migration and remittances in South Asian economies. We have followed a multi-pronged methodology in order to study the above-mentioned linkages. First, we conduct a detailed literature review on the empirical relationship between human development, migration and economic growth; both global and regional literature on South Asia is discussed. Second, we provide a descriptive analysis based on data on the inward flows of remittances; over time, changes in remittances, and changes by education and health endowment, have been studied. Third, we conduct an econometric exercise based on data from Bangladesh, India, Pakistan and Sri Lanka; the purpose of this is to identify the HRD drivers of remittances from abroad. The paper concludes with some policy recommendations for national governments in South Asia.

Growth and remittances in South Asia

The South Asia region¹ today has an estimated population of 1,568 million (23% of the world's population) with an annual population growth of

¹ Comprising Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

1.6%.² Rising real GDP growth in South Asia (Figure 1) since the 1960s has been facilitated by slow but rising growth in investment (Figure 2), an expanding export orientation (Figure 3) and the post-1990s phenomenon of rising workers' remittances (Figure 4).

While most South Asian economies are similar in their economic characteristics, such as a predominantly rural-agricultural labour force, a rising proportion of young people in the population, increased exports and remittances, their individual growth performances have been greatly affected by the political economic milieu in each country.

During the 1960s, for example, Pakistan had the highest growth rate across South Asia, and to some extent maintained this lead in the 1970s and 1980s despite the sour experiences of the nationalisation of industry and the Soviet invasion of Afghanistan. However, the 1990s transition towards democracy was painful and average growth rates plummeted. During the 1990s, the Maldives and India's growth performance improved, and during the 2000s, Bhutan, Afghanistan and India remained leaders. In the cases of Afghanistan and Bhutan the increase was partially due to the substantial excess capacity available in their economies. For India, particularly after and during the 1990s, the causes were the deregulation and liberalisation that spurred growth. Sadly, despite their respectable GDP growth history, South Asian countries still remain distant from one another in terms of intra-regional trade in goods and services.

Trends in remittances across South Asia

Today around 80% of remittance flows are directed towards developing countries and, in the past decade, this has almost doubled.³ The total value of remittances increased from US\$31 billion in 1990 to US\$83 billion in 2000, and to more than US\$338 billion in 2008. According to the *Migration and Remittances Fact Book 2011*, published by the World Bank, around 3% of the world population, or approximately 215 million people, live outside their home country. In 2010 world remittances flows had exceeded US\$440 billion, of which more than US\$325 billion was flowing in the direction of developing countries, which shows a 6% increase

² World Bank: *Migration and Remittances Fact Book 2011*.

³ Haas & Piper (2010) Remittances, migration and development: policy options and policy illusions. ADB policy document; and World Bank: *Migration and Remittances Fact Book 2011*.

Figure 1: South Asian GDP growth 1961–2011

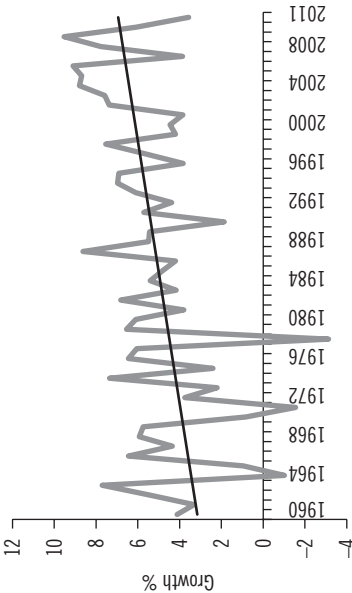


Figure 2: Fixed investment % of GDP, South Asia 1960–2012

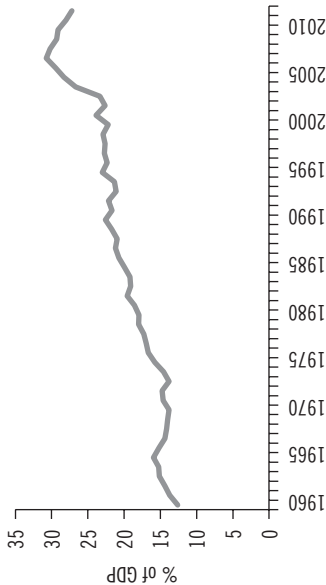


Figure 3: South Asian exports as % of GDP

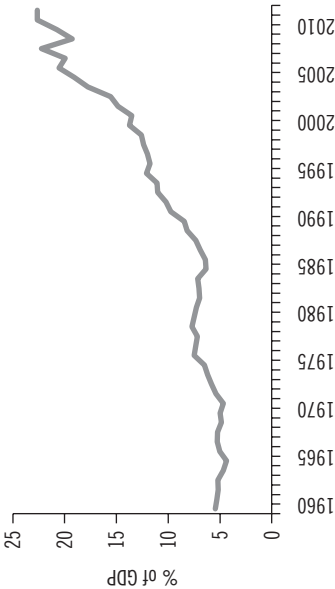
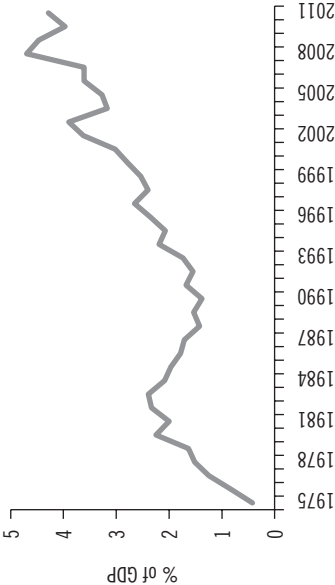


Figure 4: Workers' remittances % of GDP, South Asia

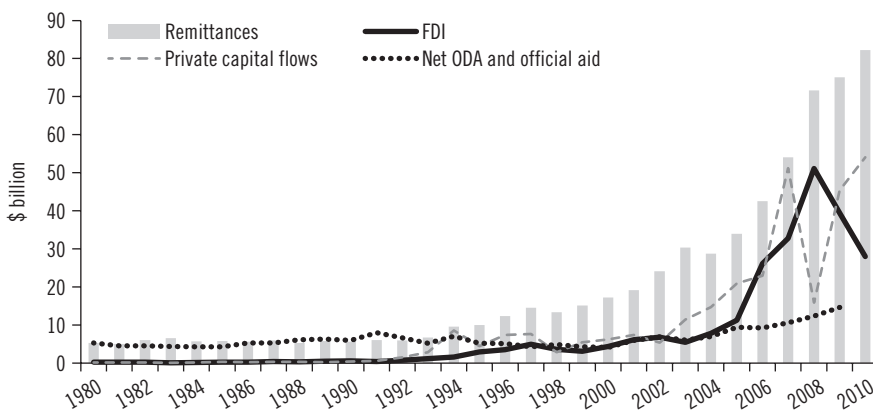


Source: World Bank (2013)

since the global crisis. This also indicates the resilience of remittances to developing countries including the South Asia region, which has recorded an increased inflow for the past two decades. The overall global external inflow shows that, in 2010, there was a decline in foreign direct investment (FDI), private investment and aid inflows – however, remittances outpaced other inflows and this is also true for the South Asian region, which is evident from Figure 5. The income flows from remittances proved to be counter-cyclical for South Asia; they increased from US\$17 billion in 2000 to US\$75 billion in 2009, and were recorded at close to US\$80 billion in 2010 for the whole region. Remittances have shown a greater increase than total private capital inflows, which stood at US\$69 billion in 2009.

Moreover, three South Asian countries are among the world's top recipients of remittances. These countries in 2010 included India (US\$55 billion), Bangladesh (US\$11.1 billion) and Pakistan (US\$9.4 billion). This is also supported by the fact that total emigration in 2010 from the South Asia region stood at 26.7 million, or 1.6% of the population, with a destination of high-income OECD countries (23.6%), high-income non-OECD countries (34.2%), intra-regional (28.2%), other developing countries (9.4%) and unidentified (4.6%), whereas immigration into the region in 2010 represented 12.2 million, or 0.7% of the population. This was broken down into 45.6% females, 20% refugees and the remainder the male labour force category.

Figure 5: External resource inflow, South Asia 1980–2011

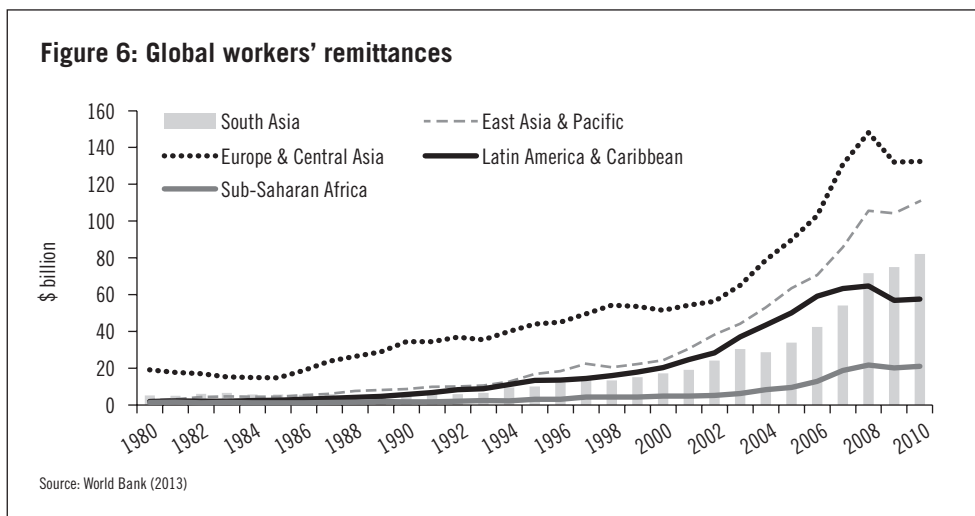


Source: World Bank (2013)

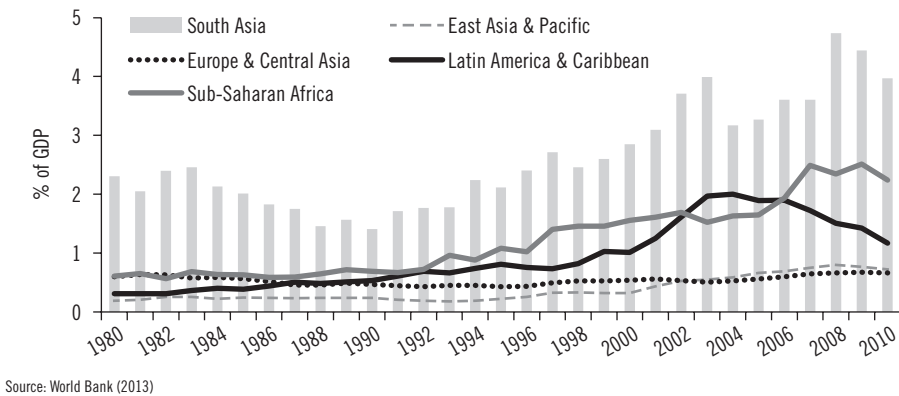
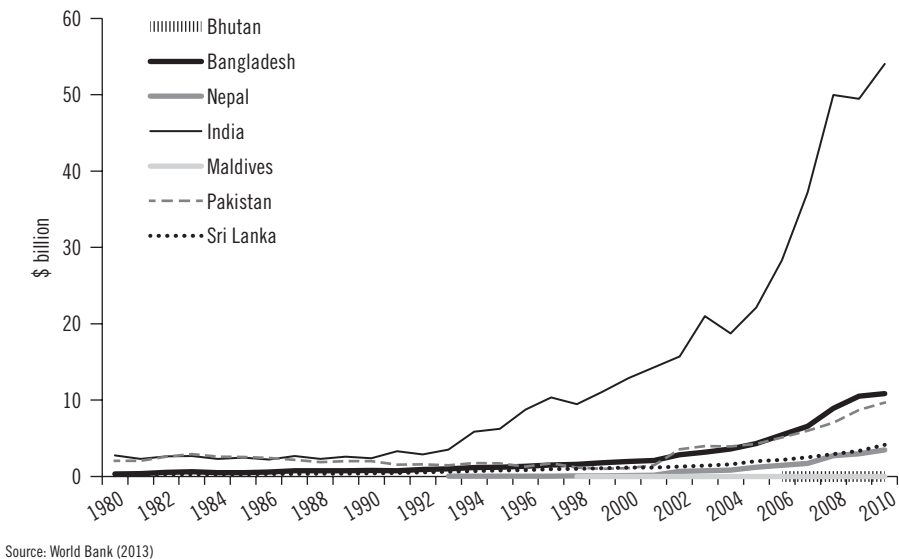
Although, in terms of the total value of remittance inflows, South Asia is lower than many other regions of the world, the resilience of South Asia-bound remittances is clearly evident despite global economic uncertainty, which in contrast has impacted upon remittance flows to other parts of the world (Figure 6). South Asia also seems to be catching up with the levels of remittances seen in the case of the East Asia and Pacific region.

If the value of remittances is seen as relative to national output, then South Asia tops the list of remittance-recipient countries (Figure 7). In this indicator South Asia is then followed by Sub-Saharan Africa and Latin America. This measure correctly portrays the economic importance and current dependence on remittance inflows seen in South Asia. It is also observable that, post-2008, the ratio of remittances to GDP has declined.

Figure 8 indicates the geographical distribution of the value of remittances received across South Asia. India received a major proportion of remittances, followed by Bangladesh and Pakistan. While India and Bangladesh both faced a slight decrease after 2008 before recovering again, remittance flows in the case of Pakistan remained resilient. In fact the remittance inflow is projected to overtake the export value of textiles in Pakistan.⁴ In terms of percentage share (Table 1), India received a 66% share of South Asian remittances, while Bangladesh and Pakistan received 13% and 12%, respectively.



⁴ The largest item in Pakistan's export basket is textiles.

Figure 7: Workers' remittances relative to GDP**Figure 8: Remittances in South Asia**

The major chunk of remittances comes from the European Union, North America and Middle Eastern countries (see Appendix). The highest remittance inflows to India can be seen to be from countries like Australia, Canada, Kuwait, Saudi Arabia, the United Arab Emirates, United Kingdom, United States, Oman and Qatar. In the case of Pakistan,

Table 1: Share of South Asian countries in regional remittance inflow, 2010

Country	%
Bhutan	0.01
Bangladesh	13
Nepal	4
India	66
Maldives	0.005
Pakistan	12
Sri Lanka	5
Total	100

Source: World Bank (2010)

a pattern has been seen where low-skilled migrants (who send a low level of remittances) are found in the Middle East and the EU. However, Pakistanis who make it to North America are usually highly qualified or highly skilled. The highest remittances share for Nepal comes from Qatar, Thailand, the US and the EU.

The level of intra-regional remittances still remains very low (Table 2). As with the high barriers to trade in goods (due to cross-border political conflicts), there is also a stiff resistance to labour move-

ment between these countries. For example, during the recent negotiations towards Pakistan granting Most Favoured Nation (MFN) status to India, it was seen that the biggest non-tariff barrier between the two countries was the limited availability of visas permitted on both sides; the situation between Bangladesh and India is similar. Another important point here is that data on labour movement within these countries are very poor. Therefore the data given and explained here represent only officially reported instances.

There is a significant share of unemployed workers having tertiary education in South Asia. Here we observe that the nature of unemployment,

Table 2: Intra-remittances inflow, South Asia (US\$ millions), 2011

Recipient country	Bangladesh	India	Maldives	Nepal	Pakistan	Sri Lanka
Afghanistan	0	0	0	0	0	0
Bangladesh	0	5,097	0	0	45	0
India	6,770	0	0	2,018	2,314	316
Nepal	1	4,025	1	0	43	1
Bhutan	0	184	0	2	0	0
Sri Lanka	0	1,628	0	0	0	0
Pakistan	0	0	0	0	0	0
Maldives	0	0	0	0	0	0
Total	6,772	10,934	1	2,020	2,402	317

Source: Asian Development Bank online database (2011)

less than global rates of return and better career prospects, led to an increase in the emigration rate of the tertiary-educated population by 10.2% in 2009. The rate is highest for Sri Lanka (having the highest literacy in South Asia), followed by Afghanistan and Pakistan (Table 3). In the case of Afghanistan and Pakistan there is evidence of conflict-induced migration, too. Many have also viewed the emigration of tertiary-educated persons as a phenomenon of ‘brain circulation’ rather than brain drain, as these people later in their lives contribute in their native country through reverse migration, joint ventures in their home country, and the transfer of technology, knowledge and ideas (Ahmed 2010).

Table 3: Emigration rate of tertiary-educated population (%), South Asia, 2009

Country	Emigration rate of tertiary educated population (%)
Afghanistan	23.3
Bangladesh	4.3
Bhutan	0.6
India	4.3
Maldives	1.2
Nepal	5.3
Pakistan	12.6
Sri Lanka	29.7
South Asia	10.2

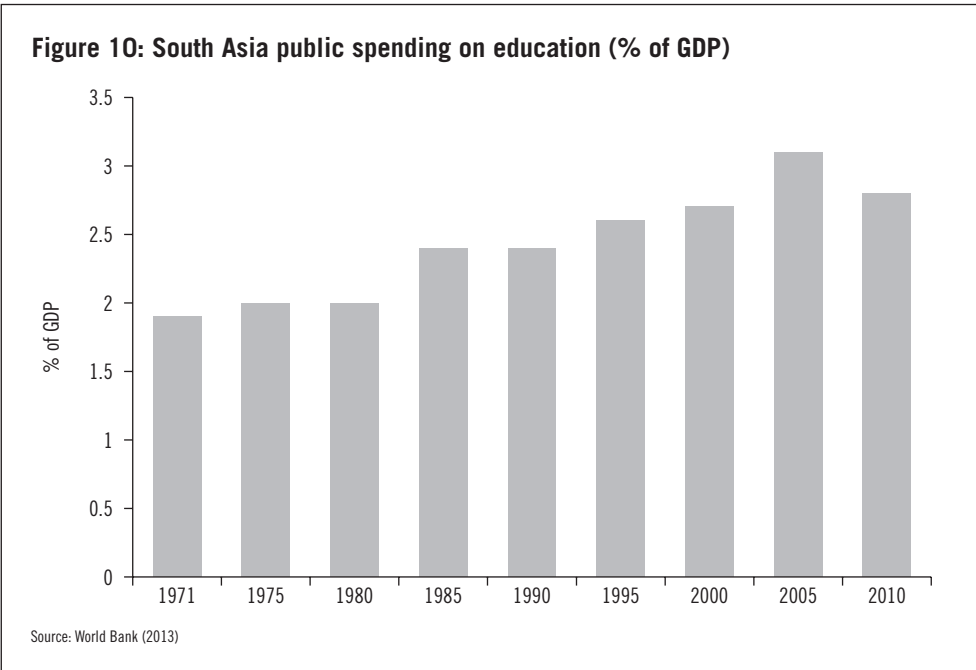
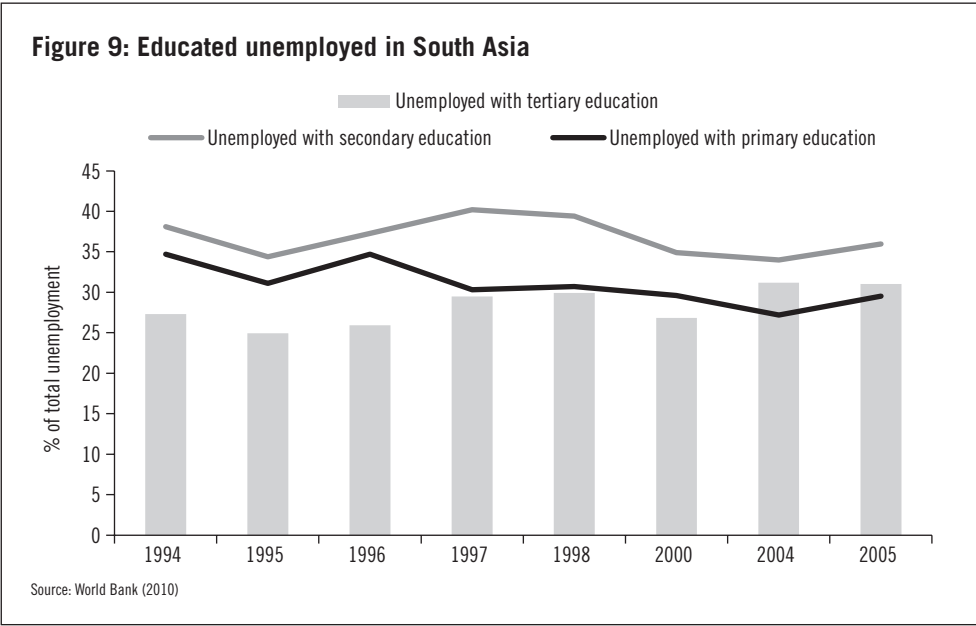
Source: World Bank (2013)

The current state of HRD in South Asia

The South Asian economies have remained slow to deregulate markets, liberalise investment and trade, and provide an enabling environment for the private sector, which has resulted in many educated young people not becoming absorbed locally. This is depicted in Figure 9, which shows the shares of educated youth by level of education. The proportion of unemployed with tertiary education has remained almost constant over time. It is those in this segment that are prone to leaving their home country and going abroad, where there is a higher rate of return to education.

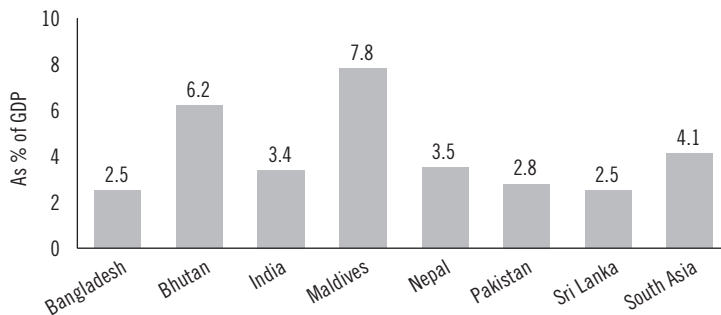
While there are questions that need to be raised about the low budgetary priority given to education in the budgets of South Asian governments (Figure 10), it must however be flagged here that even these low levels of budgetary allocation are not absorbed fully due to governance challenges within the education sector.

There is enough data to suggest that the low level of public-sector expenditure on education has prompted the private sector to step up and fill this vacuum. There are also several studies which suggest that



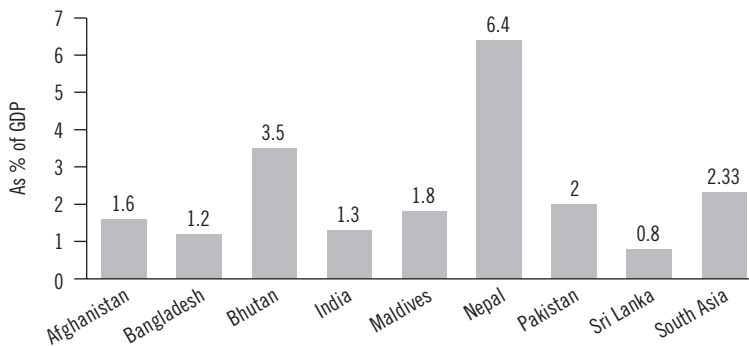
involving the private sector in the provision of education has in fact raised the quality of education in South Asia. However, there are instances of market failure that suggest the dire need for public-sector intervention for regions and communities that are not feasible for private-sector provision. India, Pakistan and Bangladesh, which house some of the largest populations in the world, spend less than any regional or global standards in terms of public expenditure on education (Figure 11). The same situation may also be observed for the health sector (Figure 12).

Figure 11: Education expenditure, annual average 2005–2012



Source: Asian Development Bank online database (2012)

Figure 12: Health expenditure, annual average 2005–2012



Source: Asian Development Bank online database (2012)

Table 4 illustrates the HDI ranking of the South Asian countries. The performance of Afghanistan and Nepal in terms of HDI ranking has declined since 2000, and they ranked 175th and 157th respectively in 2012, indicating that no improvement has taken place with regard to human development. Going forward, in order to reverse these trends, this region will have to prioritise and invest prudently if it is to train and groom its human resource for international competition.

Pakistan has shown a slight improvement in terms of improving score and ranking from 0.4 in 2000 to 0.5 in 2010. The case is similar for Bangladesh, which has shown only a slight improvement. The performance of India and the Maldives also exhibits marginal improvements. Sri Lanka has performed far better in terms of HDI as compared to other South Asian countries, due to its increased investment in human capital and, more specifically, in education, which has largely improved, and has helped Sri Lanka to increase migration and remittances from abroad.

Table 5 highlights certain education indicators for the South Asian region. The average primary education completion rate is 81.3% in the South Asian region. It is lowest for Afghanistan and highest for the Maldives, which is 107%. India, Pakistan, Bangladesh, Bhutan, Nepal and Sri Lanka have shown improvement in this indicator when compared with previous periods. The adult literacy rate for South Asia as a whole is 69.2%, which is less than in other regions of the world. The highest literacy rate (99.2%) is recorded in the Maldives, which is followed by Sri Lanka. Similarly, the net enrolment ratio is recorded as highest for the Maldives and lowest for Pakistan.

Table 4: Human Development Index 2012

Country	2000	2005	2006	2007	2008	2009	2010	Rank in 2012
Afghanistan	–	0.3	0.3	0.3	0.3	0.3	0.3	175
Pakistan	0.4	0.5	0.5	0.5	0.5	0.5	0.5	146
Bangladesh	0.4	0.4	0.4	0.4	0.5	0.5	0.5	146
Bhutan	–	–	–	–	–	–	–	140
India	0.4	0.5	0.5	0.5	0.5	0.5	0.5	136
Maldives	0.5	0.6	0.6	0.6	0.6	0.6	0.6	104
Nepal	0.4	0.4	0.4	0.4	0.4	0.4	0.4	157
Sri Lanka	–	0.6	0.6	0.6	0.7	0.7	0.7	92
South Asia	0.4	0.5	0.5	0.5	0.5	0.5	0.5	–

Source: UN Statistics Department (2012)

Table 5: Education and literacy, South Asia 2012

Country/indicators	Primary education completion rate (%)	Total net enrolment ratio in primary education (%)	Adult literacy rate (%)
Afghanistan	37.0	—	—
Pakistan	67.0	72.0	58.0
Bangladesh	70.0	94.2	57.0
Bhutan	103.0	89.2	53.0
India	97.0	93.0	66.2
Maldives	107.0	95.0	99.2
Nepal	72.0	75.3	60.0
Sri Lanka	98.0	93.0	91.0
South Asia	81.3	87.3	69.2

Source: Asian Development Bank online database (2012)

Within the education indicators, ‘mean years of schooling’ is one of the important indicators used in the Human Development Index. Table 6 shows the mean years of schooling for South Asia from 2001 to 2012. Every country in the South Asian region has shown improvement. Overall the South Asian average was 3.8% in 2001 and has now increased to 5.1% in 2012. This can be attributed to the growing population and its demand for education, which national governments or the private sector in South Asia step up to provide. Unfortunately, there are few statistics regarding private investment in the education (and health) sectors.

Table 7 shows that, in the 1990s, there was one teacher for every 43 primary school students; by 2012 this number had fallen to 31.9. However,

Table 6: Mean years of schooling, South Asia (%)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Afghanistan	2.2	2.3	2.3	2.4	2.5	2.6	2.7	2.8	3.0	3.2	3.3
Bangladesh	3.7	3.8	3.9	3.9	4.0	4.2	4.3	4.4	4.5	4.6	4.7
India	3.6	3.7	3.7	3.8	3.9	3.9	4.0	4.1	4.2	4.3	4.0
Maldives	3.0	3.2	3.4	3.5	3.7	3.8	4.0	4.2	4.3	4.5	4.4
Nepal	2.4	2.4	2.5	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.4
Pakistan	3.3	3.5	3.8	4.0	4.2	4.5	4.5	4.6	4.7	4.8	4.7
Sri Lanka	7.6	7.6	7.7	7.7	7.8	7.9	7.9	8.0	8.0	8.1	8.0
South Asia	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.9

Source: Asian Development Bank online database (2011)

Table 7: South Asia pupil–teacher ratio, 2012

Country/indicators	Primary pupil–teacher ratio			Secondary pupil–teacher ratio		
	1990	2000	2012	1990	2000	2012
Afghanistan	41.2	32.1	45	24.8	28.0	32.2
Pakistan	43.0	33.0	40	19.5	19.8	44.3
Bangladesh	63.0	47.0	24	27.4	38.4	31.0
Bhutan	–	41.1	12	–	32.5	20.0
India	46.0	40.0	42.2	28.7	33.6	25.0
Maldives	–	22.7	28	–	15.3	13.8
Nepal	39.2	42.6	40	31.1	30.2	35.0
Sri Lanka	29.1	26.3	24	19.1	19.6	17.0
South Asia	43.6	35.6	31.9	25.1	27.2	27.2

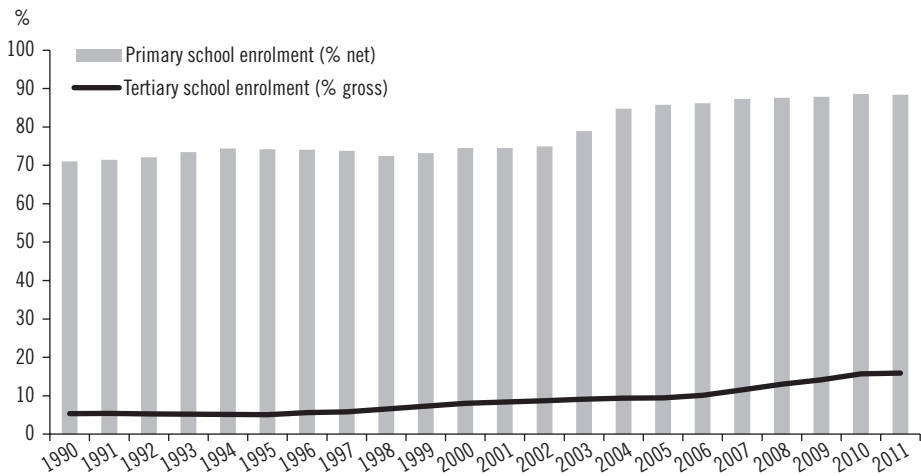
Source: World Bank (2012)

the statistics were contrary for secondary schooling, where the pupil-to-teacher ratio in fact increased. An increased number of students in a single class implied less of the teacher's attention for everyone. This certainly impacts not only the students' learning abilities, but also the teacher's own efficiency in terms of imparting knowledge in the most constructive manner.

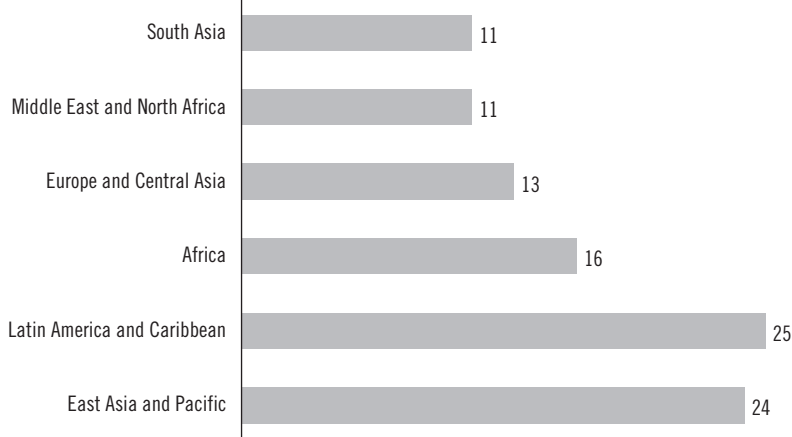
It is also important to see in Figure 13 the wide gap that exists between primary and tertiary enrolments. In 2011, while primary school enrolment in South Asia was 88.4%, tertiary enrolment was a mere 15.9%. There is wide research in this region that shows how such a gap has occurred; primarily it has to do with declining returns to education. The governments in this part of the world must act quickly in order to reverse this trend and to bring about public policies that encourage the maximum number of students to continue education to the tertiary/professional level.

Currently the level of vocational education in the South Asian region is still very low. The position of South Asia in terms of formal training lags far behind the other regions of the world. The rate of formal training stands at 11%, whereas the same rate in Latin America and the Caribbean is at 25%, and East Asia and Pacific, and Africa are at 24% and 16%, respectively (Figure 14).

The South Asia region still has a long way to go to improve its human capital base, and this will depend on reforms and structural changes in the areas of education, which also includes skill development initiatives.

Figure 13: South Asia school and tertiary enrolment

Source: World Development Indicators (2013)

Figure 14: Formal training by region (%), 2011

Source: National Skill Strategy, NAVTEC 2010–13, Pakistan

Moreover, India and Sri Lanka have shown faster improvement in higher education than the rest of South Asia (Table 8); the poorest in this regard was Nepal.

Table 8: Skill development indicators, South Asia 2012

Country	Higher education and training	Quality of education system*	Local availability of specialised research and training services	Higher education and training (rank)
Bangladesh	126	94	127	126
Nepal	131	116	133	131
India	85	39	51	85
Pakistan	123	87	97	63
Sri Lanka	62	44	46	62

* Imparting quality and new education with higher education means an increase in the enrolment from secondary level especially education at the college or university level.

Source: World Competitiveness Report 2010–11, World Economic Forum (WEF)

After education and skills development indicators we look at the health performance in the region. Table 9 shows health indicators and their performance across the South Asian countries. Health supports the level of productivity that labour needs, while eroded health has ramifications in terms of loss of labour productivity, deprivation from education, and motivational attitude towards skill development and other related concerns. The position of a few selected indicators reveals that, on average, the total fertility rate in South Asia is around three births per woman, while the prevalence of underweight children under five years is 37%, the

Table 9: South Asian health indicators 2012

Country	Total fertility rate (births per woman)	Prevalence of underweight children under five years of age (%)	Under-five mortality rate (deaths per 1,000 live births)	Infant mortality rate (deaths per 1,000 live births)	Maternal mortality ratio (per 100,000 live births)
Afghanistan	6.2	39	101	73	460
Bangladesh	2.2	46	46	37	240
Bhutan	2.3	19	54	42	180
India	2.6	48	61	47	200
Maldives	1.7	30	11	9	60
Nepal	2.7	45	48	39	170
Pakistan	3.3	38	72	59	260
Sri Lanka	2.3	29	12	11	35
South Asia	2.91	36.75	50.63	39.63	200.63

Source: World Bank (2012)

under-five mortality rate is 50.6 (per 1,000 live births), the infant mortality rate is 39.6 (per 1,000 live births) and the maternal mortality ratio stands at 200.6 (per 100,000 live births). By any global comparison South Asia has performed poorly in terms of health-sector performance.

Why has the increased labour force population not resulted in an improvement in the labour force participation rate? The answer primarily lies in the poor human resource standards that the South Asian labour force brings to the workplace. With almost 40% of children malnourished in South Asia, it is not surprising that the participation rates are low.

Linking HRD, migration and remittances: a review of the literature

Migration and development

Remittances have been known to spur development and also act in a counter-cyclical manner during times of economic crisis. The remittance inflows are in fact non-debt-creating instruments, which are safety nets managed by families and communities (Brown 2006). The literature also recognises that the contribution of remittances can be enhanced through a conducive macroeconomic environment in countries exporting manpower, innovations in the financial sector that enhance and facilitate the flow of remittances through formal channels, and greater coordination at policy level in the context of Mode 4 of the General Agreement on Trade in Services.

There is extensive research where concerns have been raised about an increasing brain drain in developing countries; the main causes highlighted for such a trend include deteriorating economic conditions, lack of good governance and political instability (Tessema 2010). Besides this, poor remuneration, a lack of professional infrastructure (in the case of medical and engineering professionals), and the insecurity of assets and earnings point towards major concern in developing countries (Tahir *et al.* 2011). However, migration is now increasingly being perceived as a normal part of social transformation processes, contrary to the earlier view that emigration was the loss of a home country's human capital (Castles 2009; Rahman 2010).

HRD strategies, economic growth and migration

The inability of most developing countries to raise a quality human resource base has been a constraint not only for growth domestically, but

also for the mobility of the labour force in the context of migration abroad. This issue has recently been highlighted as a critical constraint in the growth of India's outsourcing industry. Kuruvilla and Ranganathan (2008) highlight four interrelated human resource policy challenges for the outsourcing industry, namely current skill shortages, the inability of a country to produce higher-value skills, higher levels of employee turnover, and rapidly increasing employment costs.

The importance of HRD for economic growth has been highlighted in Asia to a larger extent after the booming growth of East Asian economies. It has been recognised that the acceleration of growth will require technological progress, which in turn originates from increases in human capital (Low 1998; Quibria 1999). However, increases in the labour force that are a consequence of demographic changes in South Asia will positively impact the quality of human capital. It would be helpful in upgrading tertiary education, particularly science and technology, making investments in research infrastructure in universities and a general macro and microeconomic milieu that promotes creativity, innovation and entrepreneurship.

The employment practices (including HRD culture) at the firm level also play a crucial role in sustaining the development of human capital. This process is helped by the entry of multinational companies into developing countries as they bring in new technologies and practices, ultimately pushing the frontiers of knowledge in developing countries outwards across the board (Lawler *et al.* 1995). This is also supported by on-the-job training, which not only addresses the needs of organisational change domestically, but also enables workers to compete abroad (Osman-Ghani & Jacobs 2005).

A new stream of analysis in South Asia focuses on the gender responsiveness of HRD policies, and their consequent impact on the domestic participation of women and their mobility abroad. Women who are skilled and mobile or have foreign access (through ICT or otherwise) have been found to prefer working abroad on account of the incongruous local labour force environment, unsafe conditions in field work, the discriminatory behaviour of superiors, and a non-recognition of women's rights and roles. This has implications for the migration of skilled women in particular. Excluding them from domestic participation in fact implies not giving them equal opportunities to obtain job-related skills, in turn making them non-competitive abroad. For an analysis of women managers in Pakistan,

see Alam (2009), and on the migration of skilled nurses from Bangladesh, see Aminuzamman (2007).

Pradhan *et al.* (2008) establishes an important connection between remittances and human resource development, and ultimately its impact on poverty alleviation. The study uses data on 36 countries including South Asia. It concludes that an increase in education has led to a positive impact on migration and remittances. This has helped in alleviating poverty in the long run, improving social conditions and opportunities in the native country, and has been largely associated with a positive impact on the balance of payments.

Education and migration

Many South Asian economies have a surplus of labour in both rural and urban areas, experiencing at times under-employment or unemployment. Migration opportunities present a possible outlet for this substantial surplus. This is particularly true for countries such as Afghanistan, where efforts are under way to negotiate cross-border labour migration. However, in order to market its labour abroad, it is essential that Afghanistan (and other South Asian economies) puts in place policies where the surplus pool of labour can be trained quickly so that their skills attract global market demand. In this context private-sector recruitment and employment exchange agencies can also play an important role (Pasha 2008). The skill level of migrants abroad significantly influences the allocation of remittances towards more productive investments in native countries (Vadean 2007).

Sward and Rao (2009) explore the link between migration and education across four villages in India and Bangladesh. Their analysis shows that, although remittances were not widely invested in education, education helped the mobility of local villagers. The authors recommend expanding programmes to improve schooling in rural areas, particularly improving the state of school facilities, providing training to teachers and enabling scholarships for children belonging to poor households. Deshingkar *et al.* (2006) also explain how a lack of skills, education and social networks prevents workers from breaking away from low-paying jobs, since skill level is positively associated with wage level. Additional efforts towards reforming public policy in education and health are required to help human development, and the migration of women and households from lower castes. For

India's case, see also Chisti (2007); for Nepal's case, see Bhattarai (2005) and Adhikari (2009).

For Nepal, Bhadra (2007) shows how the educational profile of migrants has changed over time. In the past, instances of illiterate migrants going abroad, particularly to the Middle East, were common. However, currently it is more likely to see migrants going for the same jobs who are endowed with primary and at times secondary schooling. Arif (2009), in a study on Pakistani migrants in Saudi Arabia, shows that skill composition has not changed over time and unskilled workers remain the dominant category, but the educational level of migrants is higher than the national average. Around three-quarters of migrants were employed domestically prior to their migration. The personal savings of migrants were the major source of financing the migration process, as 37% went through recruitment agencies while others were helped by their relatives or associates. These findings point towards an important observation: a more educated labour force is now available to compete for even low-skilled jobs abroad.

Sharma (2008) shows for South Asia that the lack of basic primary education reduces the chances of recruitment abroad (some developed countries have also introduced strong language requirements for those seeking to qualify for a visa). In addition, poor (and non-educated) migrants are more likely to be victims of fraud and exploitation in both the sending and receiving countries.

Sinha and Chaudhuri (2007) show for Bangladesh that public policy needs to be geared towards synchronising educational schools with training institutes and universities so that global labour demand can be targeted and internationally relevant education provided. An equal emphasis should be on language proficiency at school level. ADB (2005) shows that the education levels of migrants influence their justification and duration abroad, and also influence behaviour and the manner in which money is remitted.

Econometric investigation

For this study we carried out panel data analysis of how remittances are influenced through HRD variables in four South Asian economies (Bangladesh, India, Pakistan and Sri Lanka). The variables explored were infant mortality, school enrolment, primary (% of gross) school enrolment,

tertiary (% of gross),⁵ real per capita GDP, and private-sector credit as a % of GDP.

The main HRD and socio-economic indicators that influence the flows of remittances are considered, therefore, including health, education, the business environment in the native country, living standard in the native country and credit instruments (as an indicator for exercising freedom of enterprise). A similar specification is found in Ernesto Lopez-Cordova and Olmedo (2007).

Table 10 shows the ordinary least squares (OLS) estimates of our model. The findings show that higher infant mortality negatively impacts remittances and the results are statistically significant.⁶ In the case of education, primary school enrolment has a negative impact on remittances, whereas tertiary school enrolment has a positive impact. The results are significant, and in line with the findings of Clark and Drinkwater (2001). A labour force with higher education is more likely to contribute towards remittance inflows.

However, real per capita GDP negatively impacts upon remittances, implying that the increase in real per capita GDP will increase labour demand in the home country. The result is significant and in line with the findings of Blue (2004) that low income in the native country positively influences (migration) remittance flows. Private-sector credit as a percentage of GDP has a positive impact on remittance inflows, which implies

Table 10: Ordinary least squares (OLS) estimates

Remittances (as % of GNI)	Coefficient	Standard error	<i>t</i>	<i>P</i> > <i>t</i>
Infant mortality rate	−0.03	0.00	−8.1	0
Primary school enrolment (% gross)	−3.73	0.24	−15.7	0
Tertiary school enrolment (% gross)	0.59	0.15	3.9	0
Real per capita GDP	−0.20	0.08	−2.6	0
Credit to private sector % GDP	0.49	0.09	5.6	0
Intercept	19.33	1.57	12.3	0

No of observations = 152; $R^2 = 0.81$

⁵ We found a high correlation of secondary school enrolment with primary school enrolment, mortality rate and real per capita GDP, therefore, in order to avoid the problem of multicollinearity, we dropped the former variable.

⁶ Ernesto Lopez-Cordova & Olmedo (2007) also find a negative relationship between remittances and infant mortality.

that those who migrate have access to financial markets. This also means that a well-established financial system helps the mobility of labour inside and outside of one's country.

Due to the simplistic nature of the model there is a chance that it may have distorted the true relationship between the exogenous and endogenous variables because of country-specific factors. Therefore, to take account of this problem, we applied a least square dummy variable (LSDV) model, or fixed effect model. The LSDV model is specified with additional variables $D2i = 1$ if the observation belongs to India, 0 otherwise; $D3i = 1$ if the observation belongs to Pakistan, 0 otherwise; and $D4i = 1$ if the observation belongs to Sri Lanka, 0 otherwise. Since we have four countries, we have used only three dummies so there is no dummy for Bangladesh. In other words, the differential intercept coefficients show by how much the intercepts of India, Pakistan and Sri Lanka, respectively, differ from the intercept of Bangladesh. In short, Bangladesh becomes the benchmark for comparison among the countries.

Table 11 shows the results of the LSDV model. Comparing it with the OLS regression results discussed earlier, it shows that all the coefficients are individually highly significant. The intercept values of the four countries are also statistically different. For instance, in the case of Bangladesh, the intercept is 20.93 and for India 20.5 (= 20.93 + -0.43), for Pakistan 21.32 (= 20.93 + 0.40) and for Sri Lanka 22.70 (= 20.93 + 1.78). The differences in intercepts may be due to unique features of each country, such as differences in education and skill development facilities across countries.

Table 11: Least square dummy variable (LSDV) model

Remittances (as % of GNI)	Coefficient	Standard error	<i>t</i>	<i>P</i> > <i>t</i>
D2	-0.43	0.14	-3.13	0.00
D3	0.40	0.32	1.23	0.22
D4	1.78	0.71	2.50	0.01
Infant mortality rate	-0.01	0.00	-2.78	0.01
Primary school enrolment (% gross)	-3.31	0.29	-11.38	0.00
Tertiary school enrolment (% gross)	1.29	0.26	5.02	0.00
Real per capita GDP	-0.83	0.37	-2.24	0.03
Credit to private sector % GDP	0.69	0.16	4.36	0.00
Intercept	20.93	2.78	7.52	0.00

No of observations = 152; $R^2 = 0.86$

Conclusion and policy recommendations

This study has tried to document the linkages between HRD, migration and remittances in South Asia. The results of our qualitative and quantitative exercises suggest that an increased stock and quality of human resources (HR) leads to growth in remittances, which in turn helps developing economies to augment their balance of payments. We have also explained in detail the various channels through which HRD promotes migration and remittances, and a case has been made not to consider this process as a brain drain – rather it should be viewed by public policy practitioners as ‘brain circulation’, which can in turn result not just in increased foreign exchange reserves but also increased prospects for the transfer of technology and creative ideas.

The econometric results suggest that infant mortality, gross primary school enrolment and real per capita GDP have negative relationships with remittance inflows in South Asia, whereas gross tertiary school enrolment and credit to the private sector have positive relationships with remittances in these countries. This indicates that higher levels of education facilitate the mobility of labour, allowing better opportunities for working abroad. Furthermore we have applied a fixed effect model to study the difference in the relationship between endogenous and exogenous variables among four economies, and found a slight deviation in intercepts, which may be attributed to unique features (e.g. available HRD facilities) across countries. Our findings from the perception survey also validate that the South Asian Diaspora recognises the importance of HRD in its success abroad.

South Asia is still exporting large quantities of unskilled and semi-skilled workers. Only if these workers can be further equipped with life skills through an improved HRD regime can they become a greater source of advantage not just by remitting value-added sums from abroad, but also in terms of knowledge and technology transfers. It is ultimately the transition from a production-led to an ideas-led economy that sustains economic growth across several decades.

Going forward, in order to help the vast number of poor living in this region, South Asian governments must deliver on the promises they have established towards the Millennium Development Goals (MDGs). Several of these goals address a common objective, i.e. an improvement

in HRD. This report has shown that, despite rising economic growth in South Asia and to some extent an improvement in social sector indicators, this region is far behind in terms of global indicators of productivity and competitiveness.

Given the ‘youth bulge’ in the region, most countries will see a faster growth in labour market entrants. The growth in the domestic economies will not be enough to absorb the growing stock of labour force. This implies that South Asian workers will have to compete within the global labour force in order to secure placements abroad. Strategies for the promotion of HRD should include education and health interventions, active labour market strategies and skill development initiatives. This in turn facilitates the mobility of labour, which is by far the most important element towards a realisation of personal freedom and aspirations.

There are also prospects for a regional approach towards improvement in HRD. South Asian countries are producing home-grown solutions to local predicaments, which need to be shared across the region. Initiatives such as South Asia University and the South Asian Association for Regional Cooperation (SAARC) Human Resource Development Centre should be promoted and strengthened. The region currently has low levels of intra-regional movement of labour, which needs to be addressed. Even small measures, such as a liberalisation of the visa regime in South Asia, could enhance connectivity between people and places. Cross-border skill development initiatives can greatly reduce the cost and increase the knowledge about occupational opportunities.

South Asia also needs a collective voice when it comes to negotiating the movement of labour and the rights of migrants abroad. Currently workers from this region (particularly unskilled workers) are living in foreign countries under constant fear of harassment from foreign entry and exit regulations. Most of these workers are not fully aware of their rights and entitlements. Such a regime can only be changed through a collective intent and voice. These issues must be taken up as a priority during the SAARC summits. Civil society and related stakeholders will also have to play a more proactive role in order to mount pressure on national governments to promote the basic rights of workers, and to facilitate their internal and external movements.

Appendix

Table 12: Origin of remittances 2010 (US\$ million)

Remittances sent from	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
Australia	—	42	—	1,016	1	24	45	153
Bahrain	—	0	—	665	0	0	115	0
Canada	—	79	—	2,501	0	14	312	240
France	—	4	—	171	0	3	42	85
Germany	—	15	—	328	0	11	93	93
Italy	—	147	—	487	0	2	129	155
Japan	—	23	—	101	0	34	19	17
Jordan	—	117	—	140	0	5	54	201
Kuwait	—	429	—	1,904	0	0	247	408
Malaysia	—	252	—	517	0	0	33	9
Oman	—	306	—	2,168	0	0	191	80
Qatar	—	0	—	1,213	0	627	504	171
Saudi Arabia	—	917	—	7,034	0	65	2,022	765
Singapore	—	42	—	761	0	0	46	6
Spain	—	18	—	158	0	3	110	2
Thailand	—	11	—	117	0	128	16	53
United Arab Emirates	—	207	—	10,582	0	0	911	315
United Kingdom	—	431	—	3,185	0	115	908	222
United States	—	304	—	8,009	0	143	579	68
Other south	—	867	—	1,487	0	261	314	70
Other countries	—	6,839	—	12,455	2	2,077	2,717	499
Total	—	11,050	—	55,000	3	3,513	9,407	3,612

Source: Asian Development Bank online database (2011)

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